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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,293	10/06/2000	Takehiko Shigefuji	P19894	1800

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EXAMINER

GOODMAN, CHARLES

ART UNIT PAPER NUMBER

3724

DATE MAILED: 07/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/680,293

Applicant(s)

SHIGEFUJI ET AL.

Examiner

Charles Goodman

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 21-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 14-19 and 21-38 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The Supplemental Amendment filed on May 1, 2002 has been entered.
2. The Amendment filed on April 3, 2002 has been entered.
3. Due to the divergent subject matter of the current pending claims, including the non-elected claims 15-19, the following restriction requirement applies. This supercedes the original restriction requirement of Paper No. 4 mailed August 8, 2001.

***Election/Restrictions***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 14, 21, and 22, drawn to a method for preparing a program for a punch press, total number of replacement of punches and dies, and offset by flatness of the finished surface, classified in class 700, subclass 179.
  - II. Claims 14, 21, and 23, drawn to a method for preparing a program for a punch press, total number of replacement of punches and dies, and offset by tact time, classified in class 700, subclass 179.
  - III. Claims 14, 21, and 24, drawn to a method for preparing a program for a punch press, total number of replacement of punches and dies, and offset by number of punches for a fine finish, classified in class 700, subclass 179.
  - IV. Claims 15-16, drawn to a processing program preparing apparatus for a numerically controlled punch press and specific region, classified in class 483, subclass 9.

- V. Claims 15 and 17, drawn to a processing program preparing apparatus for a numerically controlled punch press and processing pattern information, classified in class 483, subclass 9.
- VI. Claims 15 and 18, drawn to a processing program preparing apparatus for a numerically controlled punch press and processing order information, classified in class 483, subclass 9.
- VII. Claims 15 and 19, drawn to a processing program preparing apparatus for a numerically controlled punch press and specific region and provision of apparatus and controller, classified in class 483, subclass 9.
- VIII. Claims 25-27, drawn to a method for preparing a program for a punch press, total time for replacing punches and dies, and offset by flatness of the finished surface, classified in class 700, subclass 160.
- IX. Claims 25, 26, and 28, drawn to a method for preparing a program for a punch press, total time for replacing punches and dies, and offset by tact time, classified in class 700, subclass 179.
- X. Claims 25, 26, and 29, drawn to a method for preparing a program for a punch press, total time for replacing punches and dies, and offset by number of punches for a fine finish, classified in class 700, subclass 179.
- XI. Claims 30-32, drawn to a method for preparing a program for a punch press, total number of punches required to punch a desired hole, and offset by flatness of the finished surface, classified in class 700, subclass 169.

- XII. Claims 30, 31, and 33, drawn to a method for preparing a program for a punch press, total number of punches required to punch a desired hole, and offset by tact time, classified in class 700, subclass 179.
- XIII. Claims 30, 31, and 34, drawn to a method for preparing a program for a punch press, total number of punches required to punch a desired hole, and offset by number of punches for a fine finish, classified in class 700, subclass 179.
- XIV. Claims 35-36, drawn to a computer readable medium and minimization of total number of punch and die replacements, classified in class 708, subclass 272.
- XV. Claims 35 and 37, drawn to a computer readable medium and minimization of total time for replacing punches and dies, classified in class 708, subclass 272.
- XVI. Claims 35 and 38, drawn to a computer readable medium and minimization of total number of punches required for a desired hole, classified in class 708, subclass 272.

The inventions are distinct, each from the other because of the following reasons:

- 5. Inventions I-III, VIII-X, XI-XIII and IV-VII are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by

another materially different apparatus that does not require a punch press with a plurality of punches and dies nor identification media.

6. Groups I-III are distinct from Groups VIII-XIII because they do not require the particulars of Groups VIII-XIII for patentability. For example, Groups I-III do not require minimization of the total time for replacing punches and dies and minimization of the number of punches required to punch a desired hole of Groups VIII-XIII for patentability as evidenced by the lack thereof in Groups I-III.

7. Groups VIII-X are distinct from Groups I-III and XI-XIII because they do not require the particulars of Groups I-III and XI-XIII for patentability. For example, Groups VIII-X do not require minimization of the total number of replacements of the punches and dies and minimization of the number of punches required to punch a desired hole of Groups I-III and XI-XIII for patentability as evidenced by the lack thereof in Groups VIII-X.

8. Group XI-XIII are distinct from Groups I-III and VIII-X because they do not require the particulars of Groups I-III and VIII-X for patentability. For example, Groups XI-XIII do not require minimization of the total number of replacements of the punches and dies and minimization of the total time for replacing punches and dies of Groups I-III and VIII-X for patentability as evidenced by the lack thereof in Groups XI-XIII.

9. Inventions I-III, VIII-X, XI-XIII and XIV-XVI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention

Art Unit: 3724

V has separate utility such as in a method that does not require offsets. See MPEP § 806.05(d).

10. Inventions IV-VII and XIV-XVI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as a general purpose generator for processing information data that does not require a plurality of punches and dies nor identification medium. See MPEP § 806.05(d).

11. Group I is distinct from Groups II-III because it does not require the particulars of Groups II-III for patentability. For example, Group I does not require offset by minimizing tact time and offset by minimizing the number of punches required to obtain a fine finish of Groups II-III as evidenced by the lack thereof in Group I.

12. Group II is distinct from Groups I and III because it does not require the particulars of Groups I and III for patentability. For example, Group II does not require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing the number of punches required to obtain a fine finish of Groups I and III as evidenced by the lack thereof in Group II.

13. Group III is distinct from Groups I-II because it does not require the particulars of Groups I-II for patentability. For example, Group III does not require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing tact time of Groups I-II as evidenced by the lack thereof in Group III.

14. Group IV is distinct from Groups V-VII because it does not require the particulars of Groups V-VII for patentability. For example, Group IV does not require

Art Unit: 3724

the processing pattern information; processing order information; and the provision of an automatically programming apparatus and a numerical controller of Groups V-VII for patentability as evidenced by the lack thereof in Group IV.

15. Group V is distinct from Groups IV and VI-VII because it does not require the particulars of Groups IV and VI-VII for patentability. For example, Group V does not require the start and end positions for a rectangular region; processing order information; and the provision of an automatically programming apparatus and a numerical controller of Groups IV and VI-VII for patentability as evidenced by the lack thereof in Group V.

16. Group VI is distinct from Groups IV-V and VII because it does not require the particulars of Groups IV-V and VII for patentability. For example, Group VI does not require the start and end positions for a rectangular region; processing pattern information; and the provision of an automatically programming apparatus and a numerical controller of Groups IV-V and VII for patentability as evidenced by the lack thereof in Group VI.

17. Group VII is distinct from Groups IV-VI because it does not require the particulars of Groups IV-VI for patentability. For example, Group VII does not require the start and end positions for a rectangular region; processing pattern information; and the processing order information of Groups IV-VI for patentability as evidenced by the lack thereof in Group VII.

18. Group VIII is distinct from Groups IX-X because it does not require the particulars of Groups IX-X for patentability. For example, Group VIII does not require



offset by minimizing tact time and offset by minimizing the number of punches required to obtain a fine finish of Groups IX-X as evidenced by the lack thereof in Group VIII.

19. Group IX is distinct from Groups VIII and X because it does not require the particulars of Groups VIII and X for patentability. For example, Group IX does not require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing the number of punches required to obtain a fine finish of Groups VIII and X as evidenced by the lack thereof in Group IX.

20. Group X is distinct from Groups VIII-IX because it does not require the particulars of Groups VIII-IX for patentability. For example, Group X does not require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing tact time of Groups VIII-IX as evidenced by the lack thereof in Group X.

21. Group XI is distinct from Groups XII-XIII because it does not require the particulars of Groups XII-XIII for patentability. For example, Group XI does not require offset by minimizing tact time and offset by minimizing the number of punches required to obtain a fine finish of Groups XII-XIII as evidenced by the lack thereof in Group XI.

22. Group XII is distinct from Groups XI and XIII because it does not require the particulars of Groups XI and XIII for patentability. For example, Group XII does not require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing the number of punches required to obtain a fine finish of Groups XI and XIII as evidenced by the lack thereof in Group XII.

23. Group XIII is distinct from Groups XI-XII because it does not require the particulars of Groups XI-XII for patentability. For example, Group XIII does not

Art Unit: 3724

require offset by maximizing a measure of the flatness of the finished surface and offset by minimizing tact time of Groups XI-XII as evidenced by the lack thereof in Group XIII.

24. Group XIV is distinct from Groups XV-XVI because it does not require the particulars of Groups XV-XVI for patentability. For example, Group XIV does not require minimizing the total time for replacing punches and dies and minimizing the total number of punches required to punch a desired hole of Groups XV-XVI as evidenced by the lack thereof in Group XIV.

25. Group XV is distinct from Groups XIV and XVI because it does not require the particulars of Groups XIV and XVI for patentability. For example, Group XV does not require minimizing the total number of punch and die replacements and minimizing the total number of punches required to punch a desired hole of Groups XIV and XVI as evidenced by the lack thereof in Group XV.

26. Group XVI is distinct from Groups XIV-XV because it does not require the particulars of Groups XIV-XV for patentability. For example, Group XVI does not require minimizing the total number of punch and die replacements and minimizing the total time for replacing punches and dies of Groups XIV-XV as evidenced by the lack thereof in Group XVI.

27. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

28. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-V and vice versa, restriction for examination purposes as indicated is proper.

29. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

**30. Upon election to one of the Groups above, Applicant must elect one of the following Species corresponding to the elected Group.**

31. This application contains claims directed to the following patentably distinct species of the claimed invention: Species I shown in Fig. 2; Species II shown in Figs. 3 and 4(A); Species III shown in Figs. 3 and 4(B); Species IV shown in Figs. 3 and 4(C); Species V shown in Fig. 5; Species VI shown in Fig. 6; Species VII shown in Fig. 7; Species VIII shown in Fig. 8; Species IX shown in Fig. 9; Species X shown in Fig. 10; Species XI shown in Fig. 11; Species XII shown in Fig. 12; Species XIII shown in Figs. 13-14; Species XIV shown in Fig. 15; Species XV shown in Fig. 16; Species XVI shown in Fig. 17; Species XVII shown in Figs. 18-19; Species XVIII shown in Fig. 20A; Species XIX shown in Fig. 20B; and Species XX shown in Fig. 21.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, it appears that none of the claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument

Art Unit: 3724

that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

32. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

33. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 3724

***Response to Arguments***


34. No response to the arguments is required at this time due to the above restriction requirement.

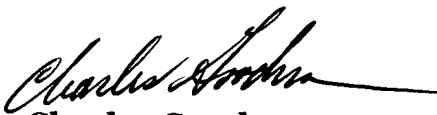
***Conclusion***

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Goodman whose telephone number is (703) 308-0501. The examiner can normally be reached on Monday-Thursday between 7:30 AM to 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap, can be reached on (703) 308-1082.

In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-1148.

cg   
July 11, 2002

  
**Charles Goodman**  
**Primary Examiner**  
**AU 3724**

**CHARLES GOODMAN**  
**PRIMARY EXAMINER**